REMARKS

Reexamination of the present application is requested.

I. Disposition of the claims

Claims 1-44 are pending and stand rejected. Claims 4, 6-7, and 21-32 are withdrawn. Claims 1-3, 5, 8-20, and 33-44 were rejected. At a minimum withdrawn claims 21-23, 25-28, and 30-32 are requested to be rejoined once the base claims from which they depend are found allowable.

II. Restriction and Election of species requirements

The Examiner required a restriction to one of the following groups:

- I. Claims 1-3, 5, 8-13, 16-23, 25-28, 30-40, 43 and 44, drawn to a nonmetallic inorganic nanomaterial, classified in class 977, subclass 776.
- II. Claims 4, 6, 7, 19, 20, 24, 29, 43 and 44, drawn to a metallic nanomaterial, classified in class 428, subclass 777.
- Ill. Claims 14, 15, 19, 20 and 41-44, drawn to a polymeric nanomaterial, classified in class 977, subclass 773.

Office action, para. 2. In Group I, the Examiner further restricted the invention as follows:

- [1] Chalcogenide: Claims 1-3, 5, 21, 22, 23, 28, 33, and 34;
- [2] Non-oxide: Claims 8, 9, 12, 13, 16-18, 25, 27, 30, 32, 35, 36, 39 and 40; and
- [3] Oxide: Claims 10, 11, 26, 31, 37, and 38.

Office action, para. 4.

In response, Group I chalcogenides (claims 1-3, 5, 21, 22, 23, 28, 33, and 34) are elected with traverse. At least the following claims embrace the elected subject matter: claims 1-3, 5, 8-15, 19-20, 33-44.

It is respectfully submitted that a serious burden does not exist as the present claims were previously examined and the Examiner essentially said as much. Office action paras. 3.1-3.2. The Examiner's position that a serious burden is not required is contradicted by MPEP § 803: "If the search and examination of **>all the claims in an< application can be made without serious burden, the examiner must examine *>them< on the merits, even

though **>they include< claims to independent or distinct inventions." § 803. Thus, the restriction and election of species requirements are improper and should be withdrawn.

III. 35 U.S.C. § 112 rejection (enablement)

Claims 1-3, 5, 16-23, 28, and 33-34 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for nanoparticles of aspect ratio greater than one (paragraph [0061]), greater than 2 (par. [0095]), and less than 25 (par. [0096]), does not reasonably provide enablement for an aspect ratio of great than 5. Office action, para. 6. As a matter of logic, this rejection cannot be proper, because at least some numbers that are less than 25 are also "greater than 5."

Furthermore, why does the Examiner doubt the teachings in the present specification, e.g., at paragraph 92 that varying the characteristics of the starting material varies the size and shape of the products? The specification teaches that nanorods/nanowiskers having an aspect ratio ranging from 1 to 25 may be made. {para. 93}. Is there a technical reason why such aspect ratios cannot be achieved? {para. 102}. The Examiner is directed to US Pat. No. 5,984,997 (incorporated by reference in paragraph 93) and in particular examples 1 and 3, which teach tungsten oxide having an aspect ratio ranging from 5 to 15 (col. 7, l. 5) and tungsten doped tin oxide having an aspect ratio ranging from 3-20 (col. 7, l. 60). It is respectfully submitted that this rejection be withdrawn.

CONCLUSION

Applicants respectfully request reconsideration and reexamination of the present application.

Applicants believe that the present application is in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

Atty. Dkt. No. 037768-0234 Appl. No. 10/811,628

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date December 20, 2007

FOLEY & LARDNER LLP Customer Number: 22428

Telephone: (202) 295-4166

Facsimile: (202) 672-5399

Sean A. Passino
Attorney for Applicants

Registration No. 45,943